MPEG-4 DVR QUICK

HIGH-END SERIES



ROHS AND WEEE COMPLIANCE



All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly "lead-free" and without the hazardous substances cited in the directive.



The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste.

1. OVERVIEW

1.1 Product Description

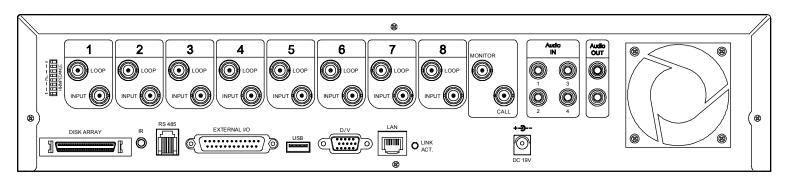
With the high storage capacity feature, this MPEG-4 DVR model is designed to accommodate up to 3 HDDs, or accommodate 2 HDDs and connect 1 independent disk array depending on your needs. To quickly backup, a CD or DVD writer (optional) and USB interface are built in for your choices except for network backup. Remote Event Trigger Recording (R.E.T.R.) can be activated remotely and any event recording will be saved in the specified path in your PC. An IR transmitter is also supplied for remote control.

1.2 Package Contents

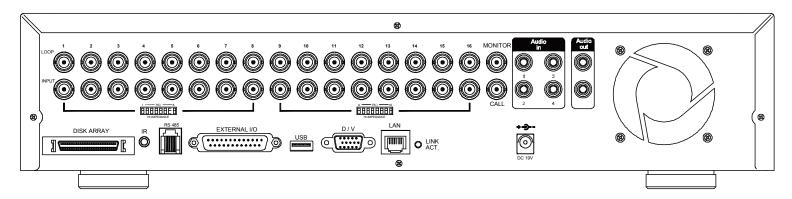
ITEMS	QTY
Digital Video Recorder (DVR)	1
Adapter and Power Cord	1
Screws	12
DSUB PIN Connector	1
HDD Data BUS Clip	1
IR Transmitter and IR Receiver Line (1.5m)	1
Manual	1
Quick Guide	1
CD or DVD disk (optional)	1
Licensed Software AP	1

2. REAR PANELS

• 8CH



· 16CH



3. SETUP AND CONNECTIONS

3.1 Install HDD

Carefully follow the steps below to ensure correct HDD installation.

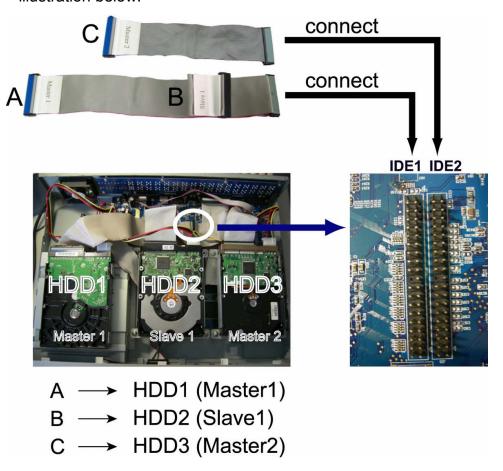
Note: The PCB side of the HDD must face upward, shown as the picture below.



- Step 1: Loosen the screws on the upper cover and open the upper cover of the DVR
- Step 2: Screw out the HDD bracket.
- Step 3: Get suitable brand HDD and set the HDD mode (Master / Slave) according to the indication.
- Step 4: After HDD mode setup, screw all the HDDs onto the HDD brackets, and replace the HDD brackets back to the indicated position of the DVR base (**Be sure to follow the indicated position shown as the picture below**).

Note: For HDD mode setting rule and position, please refer to the following instructions:

- * If you plan to install three HDDs, please set two HDDs to Master mode, and one HDD to Slave mode, and place them to the exact position according to the indication.
- * If you plan to install two HDDs, please set one HDD to Master mode and place it to the Master 1 position, and set the other HDD to Slave mode and place it to the Slave 1 position.
- * If you plan to install only one HDD, please set the HDD to Master mode and place it to the Master 1 position.
- Step 5: Depending on which HDD you want to install, connect the HDD to the indicated **power connector** and **IDE BUS** (make sure to align the HDD precisely for pin connection). For detailed connection, please follow and see the illustration below:



NOTE: If you plan to install external disk array, please don't install the HDD in the "HDD3" postion.

Step 6: Close the upper cover of the DVR, and fasten all the screws you loosened in Step 1.

3.2 Camera Connection

The cameras must be connected and power-supplied before the DVR is turned on. For detailed DVR video input / output ports, please refer to section "2. REAR PANELS" at page 1. For detailed external I/O port description, please refer to the section "5. PIN CONFIGURATION" at page 13. For detailed camera setup, please refer to its own manual.

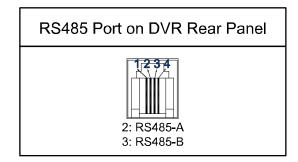
3.2.1 Normal Camera Connection

- 1) Connect the camera with indicated power supply.
- 2) Connect the camera video output signal to DVR video input port with coaxial cables or RCA line with BNC connector.

For detailed camera title, ID, protocol and baud rate setup, please refer to section "6.4.5 Remote" at page 32 of the manual.

3.2.2 PTZ Camera Connection

- 1) Connect the PTZ camera with indicated power supply.
- 2) Connect the PTZ camera video output to the DVR video input port with a coaxial cable or RCA line with BNC connector.
- 3) Connect "RS485-A" line (brown color) to RS485-A port on the rear panel of the DVR. Connect "RS485-B" line (orange color) to RS485-B port on the rear panel of the DVR.



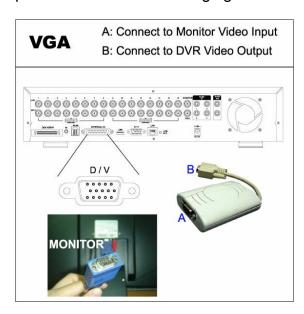
NOTE: For detailed **camera ID**, **protocol and baud rate setup at DVR side**, please refer to section "6.4.5 Remote" at page 32 of the manual.

For detailed **camera ID**, **protocol and baud rate setup at remote AP software side**, please refer to section "(1) Device" at page 55 of the manual (AP software system configuration). For detailed **PTZ setup and control instructions**, please refer to section "6.6.5 PTZ Camera Setup and Control" at page 42 of the manual.

3.3 External Device Connections (Optional)

3.3.1 VGA Converter

This optional peripheral (VGA Converter) allows your DVR to have VGA output function. For the connection method, please refer to the following figure:



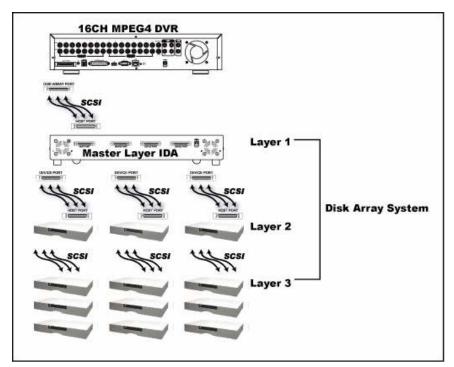
3.3.2 Independent Disk Array

For the connected IDA to be correctly detected by your DVR, please don't install HDD in the "HDD3" position (For connection details, please refer to "3.1 Install HDD" at page 2).

- Install HDDs:
 Install HDDs in the IDA. Please set the HDD as "Master" mode (do not use "Slave" mode). After all HDDs are installed, please lock the HDD tray by using the HDD key supplied in the IDA package.
- 2) Connect all IDA with SCSI cable (IDE interface): Connect from one of the three "DEVICE PORT" at one IDA rear panel to the host port of another disk array. One IDA (as the master layer) can connect up to 3 IDA as the second layer, and each IDA in the second layer can respectively connect up to 3 IDA as the third layer. Please refer to the illustration below for details.

Note: In order to accurately detect all the connected disk arrays, please make sure to turn on the power of all the disk arrays after the connection is completed. The maximum layer number is 3, totally 13 IDA.

Connect the master IDA to your DVR with a SCSI Cable (IDE interface):
 Connect the host port of the master IDA to the "DISK ARRAY" port of your DVR. Please refer to the illustration below.



Page 4

3.4 Power Setup

This device should be operated only with the type of power source indicated on the manufacturer's label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet. "POWER" LED will be on as red. Press "POWER" button, and "POWER" LED will be on as green. It takes approximately 10 to 15 seconds to boot the system.

3.5 Date and Time Setting

Before any operation of the DVR, please set the date and time on your DVR first.

You can use the following buttons for menu setting:

BUTTON	FUNCTION
UP, DOWN, LEFT, RIGHT	Move the cursor.
+ , -	Choose numbers / selections.
ENTER	Go to the submenu / confirm the selection.
MENU	Go to the menu list / confirm the change / exit the menu list.

1) Date and System:

	DATE	
DATE	2006-AUG-28	18:30:00
FORMAT	Y-M-D	
DAYLIGHT SAVING	ON	

2) Daylight Saving:

The menu path is as following: "MENU" \rightarrow "DATE" \rightarrow "DAYLIGHT SAVING".

	DAYLIGHT SAVING	
START	4 TH -SUN-MAR	24:00:00
END	4 TH -SUN-OCT	24:00:00
ADJUST	01:00	

Note: Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it's recommended to clear all HDD data, and start recording again.

Note: If the time and date settings return to their default values after the DVR is rebooted, please charge the DVR for at least 24-48 straight hours. Please contact your local retailer if the situation still occurs.

3.6 LAN or Internet Setup

3.6.1 STATIC IP

1) Build a Local Area Network (LAN) between DVR and PC/NB with network cable:

Your NB/PC and DVR must be under the same network domain to build the area network. Please change the IP address of your PC/NB into 192.168.1.X (X can be the number between 1~255, except 10) and the subnet mask into 255.255.255.0 for communicate with the DVR.

Install the supplied AP software on your NB/PC. Then, log into the DVR with the supplied AP software for the following default DVR settings.

- The DVR default IP address: 192.168.1.10
- · The DVR default account / password: admin
- The DVR default port: 80
- 2) <u>Set DVR network setting in "SYSTEM CONFIG"</u> → "Network" of the supplied AP:

In "SYSTEM CONFIG" → "Network" of the supplied AP, select the "Static IP" in "IP TYPE" section. And then type the "Server IP", "Gateway", "Net Mask" and "Web Port" (1~9999) information obtained from your ISP. Press "APPLY" button to confirm the setting.

3) Login your DVR via an Ethernet or dial-up network:

After setting up the network information of the DVR and connect it to the network, you can use the IP address / Port / Account / Password you just entered in the supplied AP software to log into your DVR remotely.



Note: Before changing the network properties of your **PC/NB**, please write down the original network properties in case you need to recover the properties later.

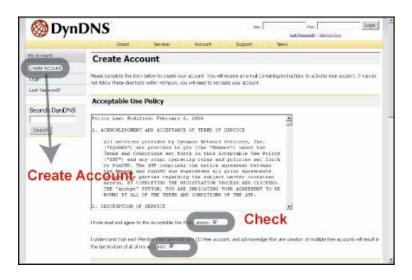
3.6.2 DDNS Apply

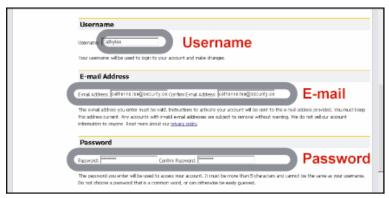
You need to apply a DDNS account before setting PPPoE or DHCP connection. DDNS is a service for transforming the dynamic IP corresponding to a specific "Hostname". For DDNS setup, please refer to the steps below.

Go to a website which provides free DDNS services and apply a "Hostname".
 For example, go to http://www.dyndns.com.



• Enter all the information necessary for signing up an account according to the website instructions.







Then, you will see the screen "Account Created", and Dyndns will email the instructions to your specified E-mail
address for enabling your account. You must complete the procedure according to the instructions in the mail. That is
to must visit the confirmation address within 48 hours of the time that the e-mail was sent to complete the account
creation process. Then, you will see "Account Confirmed". Your account is created successfully now.



· Log in with your account information and click "My Service".



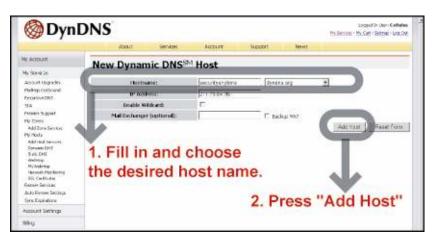
Click "Add Host Services".



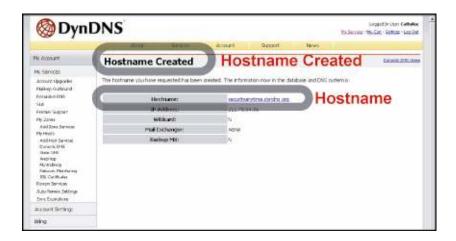
Click "Add Dynamic DNS Host".



• Fill in and choose the desired host name.



• The host name is created. You will be connected to the corresponding IP address whenever you enter this hostname.



3.6.3 Dynamic IP — PPPOE

1) Build a Local Area Network (LAN) between DVR and PC/NB with network cable:

Your NB/PC and DVR must be under the same network domain to build the area network. Please change the IP address of your PC/NB into 192.168.1.X (X can be the number between 1~255, except 10) and the subnet mask into 255.255.255.0 for communicate with the DVR.

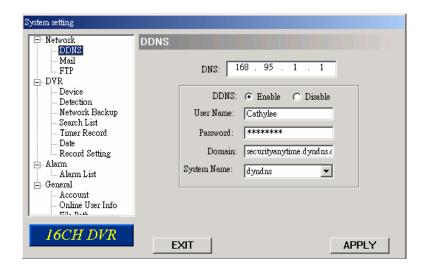
Install the supplied AP software on your NB/PC. And then login the DVR with the supplied AP software for the following default DVR settings.

- The DVR default IP address: 192.168.1.10
- · The DVR default account / password: admin
- The DVR default port: 80
- 2) <u>Set DVR network setting in "SYSTEM CONFIG"</u> → "Network" of the supplied AP:

In the "SYSTEM CONFIG" → "Network" of the supplied AP, select the "**PPPOE**" in "IP TYPE" section. And then type the "**User Name**" and "**Password**" obtained from your ISP. Press "APPLY" button to confirm the setting.

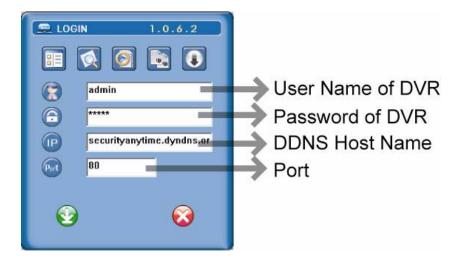
- 3) <u>Set DVR DDNS setting in the "SYSTEM CONFIG"</u> → "Network" → "DDNS" of the supplied AP software.
- DDNS: Choose "Enable".
- · User Name: Type your DDNS account.
- · Password: Type your DDNS password.
- Domain: Type the "Host Name" you applied previously (EX: securityanytime.dyndns.org).
- System Name: Choose the **DDNS server** where you applied the domain name (EX: dyndns).

After setting, please press "APPLY" button to confirm and finish the setting.



4) Login your DVR via an Ethernet or dial-up network.:

After setup the network information of the DVR, you can type DDNS host name and default user name and password in the supplied AP software login page to log into your DVR remotely.



3.6.4 Dynamic IP — DHCP

Get a router and use the default IP address provided by your router to login to the router. Enable the DHCP server and set the starting IP address, ending IP address and lease time. The DHCP Server of the router will automatically allocate an unused IP address from the IP address pool to the requesting computer.

1) Build a Local Area Network (LAN) between DVR and PC/NB with network cable:

Your NB/PC and DVR must be under the same network domain to build the area network. Please change the IP address of your PC/NB into 192.168.1.X (X can be the number between 1~255, except 10) and the subnet mask into 255.255.255.0 for communicate with the DVR.

Install the supplied AP software on your NB/PC. And then login the DVR with the supplied AP software for the following default DVR settings.

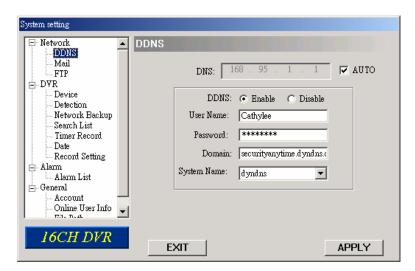
- The DVR default IP address: 192.168.1.10
- · The DVR default account / password: admin
- The DVR default port: 80
- 2) Set DVR network setting in "SYSTEM CONFIG" → "Network" of the supplied AP:

In the "SYSTEM CONFIG" → "Network" of the supplied AP, select the "**DHCP**" in "IP TYPE" section. Then press "APPLY" button to confirm the setting.

Set DVR DDNS setting in the "SYSTEM CONFIG" → "Network" → "DDNS" of the supplied AP software.

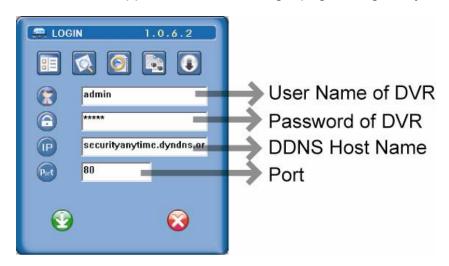
- · DDNS: Choose "Enable".
- User Name: Type your **DDNS account**.
- · Password: Type your **DDNS password**.
- Domain: Type the "Host Name" you applied previously (EX: securityanytime.dyndns.org).
- · System Name: Choose the DDNS server where you applied the domain name (EX: dyndns).

3) After setting, please press "APPLY" button to confirm and finish the setting.



4) Login your DVR via an Ethernet or dial-up network:

After setup the network information of the DVR, you can type DDNS host name and default user name and password in the supplied AP software login page to log into your DVR remotely.



3.7 Password and User Name Setting

3.7.1 DVR Password Setting

You can use the following buttons for menu setting:

BUTTON	FUNCTION
UP, DOWN, LEFT, RIGHT	Move the cursor.
+ , -	Choose numbers / selections.
ENTER	Go to the submenu / confirm the selection.
MENU	Go to the menu list / confirm the change / exit the menu list.

1) Admin password:

Password for supervisor, allow all the setup of DVR.

2) Guest password:

Only allow viewing the live streaming video and sequencing display, shifting the channel display, and locking keys.

Note: The menu path is as following: MENU \rightarrow ADVANCE \rightarrow SYSTEM \rightarrow PASSWORD \rightarrow SETUP \rightarrow ADMIN PASSWORD / GUEST PASSWORD.

3.7.2 Remote Login Password and User Name Setting

In the "SYSTEM CONFIG" \rightarrow "General" \rightarrow "Account" of the supplied AP, you can set up the user's account (Max 5 accounts), password, life time, and authority level (Max 5 users on line at the same time) for remote login to the DVR. For detailed instructions, please refer to "(1) Account" in the section "7.5.4 General" at page 64 of the manual.

4. RECORDING

This device offers three recording modes: manual record, event record and timer record. If the power is off accidentally, the recorded video data will not be lost and is safely stored in the HDD. The device will return to the original recording status after the power is on again.

· MANUAL RECORD (continuous recording)

Recording is initiated by manually pressing "REC" button on the front panel. This mode is indicated by the sign "•" on the screen.

• EVENT RECORD (triggered by motion and external alarm)

When this function is activated, the recording is triggered by motion or external alarms. This mode is indicated by the sign " # " (motion) or " # " (external alarm) on the screen.

• TIMER RECORD (scheduled time)

Recording is scheduled by TIMER function.

This mode is indicated by the wording "TIMER RECORD".

When the recording function is activated, please **DO NOT** change the date or time on your DVR. The recorded data will be disordered and you will not be able to find the recorded data to backup by time search.

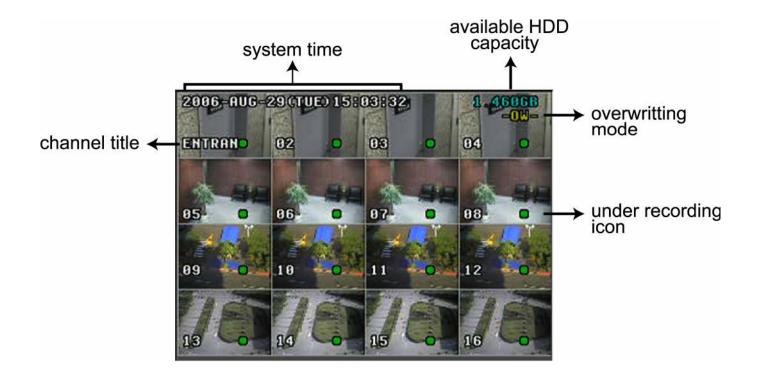
Note: If users change the date or time accidentally when the recording function is activated, it's recommended to clear all HDD data, and start recording again.

Overwriting Mode

If the overwriting mode is enabled, you will see "-OW-" (1) under the recording mode except the system time (2), available HDD capacity (3), recording icon (4) and channel title (5).

When the HDD is full under "-OW-" recording mode, the previous recorded data will be overwritten without notice. Under "-OW-" mode, this device will clear **8GB** data from the oldest for continuous recording once the HDD is full.

To turn on/off this mode, please refer to the section "6.4.6 System" at page 33.



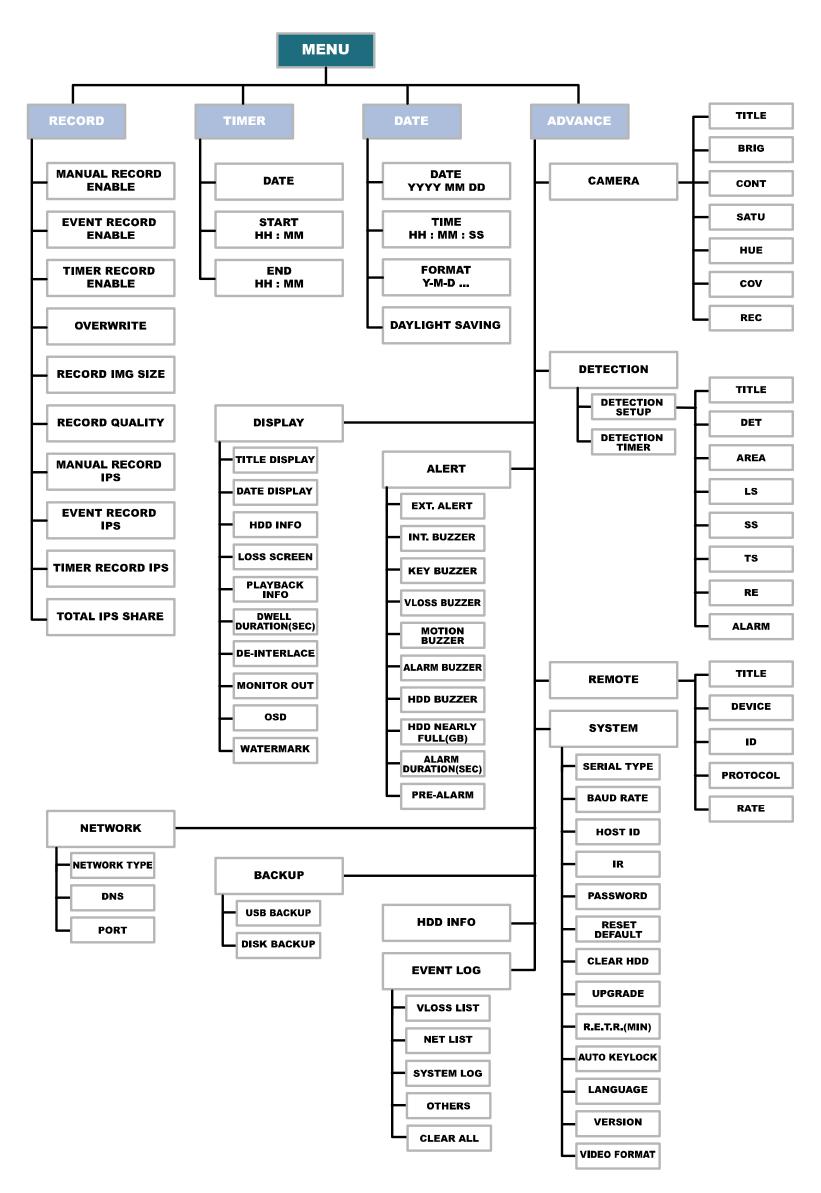
5. PIN CONFIGURATION

When the magnetic contact is opened, the alarm will be triggered and the recording is on. At the same time, COM connects with NO and the siren with strobe starts wailing and flashing.

NOTE: Please go to MENU -> ADVANCE -> DETECTION -> DETECTION SETUP, and set ALARM to LOW on the local machine.



PIN	FUNCTION	DESCRIPTION
1	GND	GROUND
2~9	ALARM INPUT	When connecting the wire from ALARM INPUT (PIN 2 9) to GND (PIN 1) connector, DVR will start recording and the buzzer will be on.
10	PIN OFF	
11	TXD232	Using RS-232 serial communication signals, DVR can be controlled remotely by the keyboard of PC
12	RS485-A	Using RS-485 serial communication signals, DVR can be controlled remotely by the keyboard of PC
13	EXTERNAL ALARM NO.	Under the normal operation, COM disconnects with NO. But when any alarm is triggered, COM connects with NO. Attention: The voltage restriction is under DC24V 1A.
14	PIN OFF	
15~22	ALARM INPUT	When connecting the wire from ALARM INPUT (PIN 15 22) to GND (PIN 1) connector, DVR will start recording and the buzzer will be on.
23	RXD232	Using RS-232 serial communication signals, DVR can be controlled remotely by the keyboard of PC
24	RS485-B	Using RS-485 serial communication signals, DVR can be controlled remotely by the keyboard of PC
25	EXTERNAL ALARM COM	Under the normal operation, COM disconnects with NO. But when any alarm is triggered, COM connects with NO. Attention: The voltage restriction is under DC24V 1A.



Page 14